Amendments to the Specification:

Please amend the title as follows:

~~RECORDING METHOD, RECORDING AND REPRODUCING METHOD, RECORDING DEVICE, RECORDING AND REPRODUCING DEVICE, AND REPRODUCING DEVICE FOR OPTICAL INFORMATION RECORDING AND REPRODUCING MEDIUM, AND THE~~ OPTICAL INFORMATION RECORDING AND REPRODUCING MEDIUM

Please replace the paragraph beginning on page 2, line 14, and continuing to page 3, line 1, with the following rewritten paragraph:

In a magneto-optical disk which is one of the rewritable types, recording is performed by irradiating a magneto-optical recording film disposed in the optical disk with a high-output laser beam to change a magnetized state. A read signal is detected by using a magneto-optical effect of the magneto-optical recording film and based on a change in a polarization surface of a reflected light from the magneto-optical recording film. In a phase change optical disk which is another embodiment of a rewritable type, recording is performed by applying a high-output laser beam to cause a phase change in a ~~phage~~ phase change recording film disposed in the optical disk. As in the case of the phase change optical disk of the recordable type, a read signal is detected based on a change in the amount of a reflected light from the phase change recording film.

Please replace the paragraph beginning on page 16, line 10, and continuing to page 17, line 2, with the following rewritten paragraph:

That is, the medium 10 is an optical information recording and reproducing medium of a two-layered phase change type. The medium 10 comprises phase change type first and second recording layers 12 and 14 on a substrate 11, and is constituted by optically separating both recording layers from

each other through a spacer layer 13. The substrate 11 is made of a glass, metal or polycarbonate resin, has a sufficient thickness of, for example, about 0.6 mm to be provided with rigidity equal to that of an optical disk such as a CD (Compact Disk) or a DVD (Digital Versatile Disk), and a concentric circle guide groove or spiral guide groove (not shown) is formed beforehand on its surface. The first recording layer 12 comprises a lower protective film 12A, a phase change recording film 12B and an upper protective layer 12C which are sequentially stacked together, and is formed on the substrate 11 by deposition method such as sputtering. The phase change recording film 12B is made of a material which causes a ~~phage~~ phase change by irradiation with a relatively high-output laser beam.

Please replace the paragraph on page 17, lines 16 to 26, with the following rewritten paragraph:

The second recording layer 14 comprises a lower protective film 14A, a phase change recording film 14B, an upper protective layer 14C, and a reflective film 14D which are sequentially stacked together, and is formed on the spacer layer 13 by deposition method such as sputtering. The phase change recording film 14B is made of a material which causes a ~~phage~~ phase change by irradiation with a relatively high-output laser beam as in the case of the phase change recording film 12B. The reflective film 14D is made of a material which exhibits a fixed reflectance with respect to an incident light.

Please replace the paragraph on page 23, lines 3 to 24, with the following rewritten paragraph:

Now, the recording layer management information will be described in detail. The recording layer management information must contain at least information indicating recording state of each of areas into which the inside of the data recording area is divided. However, a form of the management information is free. For example, as information indicating a recording state, a combination of ~~(~~

recording layer number, start address of recorded part, and end address of recorded part, ~~+~~ or a combination of ~~{~~ recording layer number, target area number, start address of recorded part, and end address of recorded part ~~+~~ may be employed. If defect management information is contained, a combination of ~~{~~ kind of information: recorded information or defect information, target area number, start address of recorded part, end address of recorded part, start address of recording inhibited part due to defect, and end address of recording inhibited part due to defect, ~~+~~ or a combination of ~~{~~ flag indicating defect information, target area number, start address of recording inhibited part due to defect, and end address of recording inhibited part due to defect ~~+~~ may be employed. Their information may be mixed to form management information.

Please replace the paragraph beginning on page 24, line 25, and continuing to page 25, line 16, with the following rewritten paragraph:

When management is performed based on a radial position of an optical head used for recording and reproducing, a combination of ~~{~~ recording layer number, start radius of recorded part, and end radius of recorded part, ~~+~~ or a combination of ~~{~~ recording layer number, target area radius, start radius of recorded part, and end radius of recorded part ~~+~~ may be employed. If defect management information is contained, a combination of ~~{~~ kind of information: recorded information or defect information, target area radius, start radius of recorded part, end radius of recorded part, start radius of recording inhibited part due to defect, and end radius of recording inhibited part due to defect, ~~+~~ or a combination of ~~{~~ flag indicating defect information, target area radius, start radius of recording inhibited part due to defect, and end radius of recording inhibited part due to defect ~~+~~. Additionally, their information may be combined to form management information, and can be used together with the aforementioned addresses.

Please replace the paragraph beginniing on page 24, line 17, and continuing to page 25, line 11, with the following rewritten paragraph:

When user data continuous for a long time such as video or audio data is managed, a position of a recording start time zero may be set as a reference on the medium, and information may be managed based on a recording time with it as a reference. In this case, a combination of ~~(~~ recording layer number, recording start time of recorded part, and end time of recorded part, ~~)~~ or a combination of ~~(~~ recording layer number, target area start time, start time of recorded part, and end time of recorded part ~~)~~ may be employed. If defect management information is contained, a combination of ~~(~~ kind of information: recorded information or defect information, recording start time of target area, start time of recorded part, end time of recorded part, start time of recording inhibited part due to defect, and end time of recording inhibited part due to defect, ~~)~~ or a combination of ~~(~~ flag indicating defect information, recording start time of target area, start time of recording inhibited part due to defect, and end time of recording inhibited part due to defect ~~)~~ may be employed. Additionally, their information may be combined to form management information, and can be used together with the aforementioned addresses and the radial positions.

Please replace the paragraph on page 26, lines 7 to 15, with the following rewritten paragraph:

According to the medium 10, for the guide groove in which the first recording layer 12 is formed, a guide groove (wobbling groove) 31 formatted into a wobbling shape meandering in a direction orthogonal to a tracking direction similar to that shown in FIG. 6 is employed. In the optical disk or the like, generally, an address imparting part 32 is disposed in a part of the guide groove in a ~~trangential~~ tangential direction to impart address information of each track constituting the guide groove.

Please replace the paragraph beginning on page 69, line 21, and continuing to page 70, line 3, with the following rewritten paragraph:

Optical characteristics of the medium of the embodiment were measured.

When a laser beam having a wavelength of 405 nm was applied from the substrate 11 side, in the case of the first recording layer 12 alone, reflectance for un-recorded crystal state was 5% and transmittance was 60%. ~~Rreflectance~~ Reflectance for recorded amorphous state was 13% and transmittance was 45%. In the case of the second recording layer 14 alone, reflectance was 13% for un-recorded crystal state, and reflectance was 35% for recorded amorphous state.